

Remarks

Applicant has reviewed the Office Action dated as mailed October 10, 2006. After the above amendments have been made, the present application contains claims 1, 3-5, 9-15, 17-18, 20-22, 25-31, 33, 35-37, 40-48. Claims 1, 3, 9, 15, 17, 20, 22, 25, 31, 33, 35, 37, and 40 have been amended. Claim 2, 6-8, 16, 19, 23, 24, 32, 34, 38, and 39 have been canceled. New claims 46-48 have been added.

Claim Rejections Under 35 U.S.C. §102

Claims 1, 2, 6-16, 19-24, 28-32, 34-39 and 43-45 were rejected under 35 U.S.C. §102(e) as being anticipated by Turnbull (U.S. Patent Pub. 2004/0022395; hereinafter "Turnbull"). This rejection is respectfully traversed. Turning initially to the rejection of claim 1, claim 1 has been amended to recite:

"wherein the push-to-talk sensor or switch includes at least one of an accelerometer, a pressure sensitive switch, and a tilt sensor for sensing a change in a direction of force due to gravity;..."

In contrast, Turnbull in paragraphs [0024] – [0026] recites:

"[0024] Mode selecting apparatus 130 allows a user to select VOX mode or a PTT mode for transmitting signals from microphone 115 via a radio device. When mode selecting apparatus 130 is in PTT mode, PTT switch 133 is enabled and when mode selecting apparatus 130 is in VOX mode, PTT switch 133 is disabled. It will be understood that if mode selecting apparatus 130 is in PTT mode and the associated radio device (such as radio 280 of FIG. 2) includes VOX circuit, the VOX circuit of the associated radio may still be enabled.

[0025] In this embodiment, mode selecting apparatus 130 includes slide switch 132 for selecting a transmission mode, e.g., by moving slides which 132 with a finger of a user's hand. Slide switch 132 is shown in PTT mode, wherein a user needs to engage PTT switch 133 in order to make a transmission. Preferably, mode selecting apparatus 130 includes both slide switch 132 and PTT switch 133, but in many embodiments PTT switch 133 is a distinct component and not within the housing of mode selecting apparatus 130.

[0026] In the embodiment shown in FIG. 1, PTT switch 133 is a push-button switch. However, in some embodiments, slide switch 132 and PTT switch 133 have alternative

forms and can be any type of switch known by those skilled in the art. For example, PTT switch 133 can be a toggle switch, a lever, a rotatable switch, a grip switch, etc.”

Applicant respectfully submits that Turnbull does not teach or suggest a hands-free push-to-talk sensor or switch that includes at least one of an accelerometer, a pressure sensitive switch, and a tilt sensor for sensing a change in a direction of force due to gravity as provided by the embodiment of the present invention as recited in claim 1. Accordingly, Applicant respectfully submits that claim 1 is patentably distinguishable over Turnbull, and reconsideration and withdrawal of the 35 U.S.C. §102(e) rejection of claim 1 is respectfully requested.

Regarding the rejection of claims 9-14 under 35 U.S.C. §102(e) as being anticipated by Turnbull, these claims recited additional features which further patentably distinguish over Turnbull. For example, claim 9 recites: “wherein the push-to-talk sensor or switch comprises the air pressure sensitive switch, wherein a transmit mode of the communications device is activated in response to the air pressure sensitive switch receiving a preset air pressure.” The Office Action asserted that the component 115 in Figure 3 was a pressure sensitive switch. As indicated in the recitation from Turnbull above, component 115 is a microphone and not an air pressure sensitive switch as required by the embodiment of the present invention recited in claim 9. Applicant respectfully submits that there is no teaching or suggestion in Turnbull of an air pressure sensitive switch wherein the transmit mode of the communications device is activated in response to the pressure sensitive switch receiving a preset air pressure as provided by the embodiment of the present invention as recited in claim 9.

Further, claims 9 and 12-14 depend directly from independent claim 1 and claims 10 and 11 depend directly from dependent claim 9. Because of these dependencies, claims 9-14 contain all of the features of claim 1 and any intermediate claims. Accordingly, claims 9-14 are submitted to also be patentably distinguishable over Turnbull, and reconsideration and withdrawal of the Section 102 rejection of claims 9-14 is respectfully solicited.

Regarding the rejection of independent claim 15 under 35 U.S.C. §102(e) as being anticipated by Turnbull, claim 15 has been amended to recite similar features to independent claim 1. Therefore, claim 15 is submitted to be patentably distinguishable over Turnbull for the same reasons as discussed with respect to claim 1. Reconsideration and withdrawal of the 35 U.S.C. §102 rejection of claim 15 is, therefore, respectfully solicited.

With respect to the rejection of claims 20 and 21 under 35 U.S.C. §102(e) as being anticipated by Turnbull, these claims recite additional features which further patentably distinguish over Turnbull. Claim 20 recites similar features to dependent claim 9. Additionally, claims 20 and 21 depend directly from independent claim 15, and by virtue of that dependency, contain all of the features of independent claim 15. Therefore, claims 20 and 21 are also submitted to be patentably distinguishable over Turnbull, and reconsideration and withdrawal of the Section 102 rejection of claims 20 and 21 is respectfully requested.

Turning now to the rejection of independent claim 22 under 35 U.S.C. §102(e) as being anticipated by Turnbull, claim 22 has been amended to recite:

“detecting at least one of a predetermined movement of a motion sensor or an accelerometer, a tilt angle caused by a change in a direction of force due to gravity, or air pressure;...”

As previously discussed, with respect to the rejection of independent claim 1, Applicant respectfully submits that Turnbull does not teach or suggest detecting at least one of a predetermined movement of a motion sensor or an accelerometer, a tilt angle caused by a change in a direction of force due to gravity, or air pressure as provided by the embodiment of the present invention as recited in amended claim 22. Accordingly, Applicant respectfully submits that claim 22 is patentably distinct over Turnbull, and reconsideration and withdrawal of the 35 U.S.C. §102(e) rejection of independent claim 22 is respectfully solicited.

Regarding the rejection of claims 25-30 under 35 U.S.C. §102(e) as being anticipated by Turnbull, these claims recite additional features which further patentably distinguish over Turnbull. For example, claim 25 recites: “wherein detecting the tilt angle comprises detecting a tilt sensor being tilted more than a predetermined angle from a normalized angle of the direction of force due to gravity for a predetermined duration.” Claims 26 and 27 depend directly from claim 25. Claim 28 recites: “detecting an air pressure greater than a preset air pressure.” And claims 29 and 30 depend either directly or indirectly from claim 28. Furthermore, claims 25-30 also depend either directly or indirectly from independent claim 22. Because of these dependencies, claims 25-30 contain all of the features of independent claim 22 and any intermediate claims. For all of these reasons, claims 25-30 are submitted to be patentably distinguishable over Turnbull.

Reconsideration and withdrawal of the 35 U.S.C. §102 rejection of claims 25-30 is respectfully solicited.

Regarding the rejection of claim 31 under 35 U.S.C. §102(e) as being anticipated by Turnbull, claim 31 has been amended to recite:

“providing a hands-free push-to-talk sensor or switch operable by at least one of a predetermined movement of the sensor or switch, or air pressure, wherein the push-to-talk sensor or switch includes at least one of an accelerometer, an air pressure sensitive switch, and a tilt sensor for sensing a change in a direction of force due to gravity ...”

In contrast, as previously discusses, Turnbull does not teach or suggest a hands-free push-to-talk sensor or switch wherein the push-to-talk sensor or switch includes at least one of an accelerometer, an air pressure sensitive switch, and a tilt sensor for sensing a change in a direction of force due to gravity as provided by the embodiment of the present invention as recited in independent claim 31. Therefore, claim 31 is submitted to be patentably distinguishable over Turnbull, and reconsideration and withdrawal of the Section 102 rejection of claim 31 is respectfully requested.

Regarding the rejection of claims 35-36, these claims recited additional features which further patentably distinguish over Turnbull. Additionally, these claims depend either directly or indirectly from independent claim 31, and by virtue of that dependency, contain all of the features of independent claim 31. Therefore, claims 35 and 36 are also submitted to be patentably distinguishable over Turnbull, and reconsideration and withdrawal of the Section 102 rejection of these claims is respectfully solicited.

Turning now to the rejection of independent claim 37 under 35 U.S.C. §102(e) as being anticipated by Turnbull, claim 37 has been amended to recite: “detecting at least one of a predetermined movement of a motion sensor or an accelerometer, a tilt angle caused by a change in a direction of movement due gravity, or air pressure...” As previously discussed, Turnbull does not teach or suggest determining at least one of a predetermined movement of a motion sensor or an accelerometer, a tilt angle caused by a change in a direction of force due to gravity, or air pressure as provided by the embodiment of the present invention as recited in claim 37. Accordingly, claim 37 is submitted to be patentably distinguishable over Turnbull, and reconsideration and withdrawal of the 35 U.S.C. §102(e) rejection of claim 37 is respectfully requested.

With regard to the rejection of claims 43-45 under 35 U.S.C. §102(e) as being anticipated by Turnbull, these claims recite additional features which further patentably distinguish over Turnbull. Additionally, these claims depend either directly or indirectly from independent claim 37, and by virtue of this dependency, contain all of the features of independent claim 37. Accordingly, claims 43-45 are also submitted to be patentably distinguishable over Turnbull, and reconsideration and withdrawal of the Section 103 rejection of claims 43-45 is respectfully requested.

Claim Rejections Under 35 U.S.C. §103

Claims 3-5, 17, 18, 25-27, 33, and 40-42 were rejected under 35 U.S.C. §103(a) as being unpatentable over Turnbull as applied to claims 1, 15, 22, 31 and 37, and further in view of Magnasco et al. (U.S. Patent 6,016,347; hereinafter "Magnasco"). This rejection is respectfully traversed. Applicant respectfully submits that this rejection under 35 U.S.C. §103 does not follow the M.P.E.P. §706.02(j) which states:

"After indicating that the rejection is under 35 U.S.C. §103, the examiner should set forth in the Office Action: . . . (B) the difference or differences in the claim over the applied reference(s), (C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and (D) an explanation of why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification . . . The teaching or suggestion to make the claimed combination and the reasonable expectation of the success must both be found in the prior art and not based on applicant's disclosure." *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir.1991).

As discussed in detail below, Applicant respectfully submits that there is no teaching or suggestion in Turnbull and Magnasco that their teachings may be combined so as to provide the present invention as recited in the claims and such motivation only comes from Applicant's disclosure. This approach constitutes impermissible hindsight and must be avoided. Referring to Figure 1 of Turnbull and paragraph [0019], in paragraph [0019] Turnbull recites:

"When in use, speaker 105 is placed close to a user's ear. In one embodiment, speaker 105 is held adjacent to a user's ear canal using EARGEL™ ear molds manufactured by Jabra Corporation, the assignee of the present invention."

Also referring to Figure 2 of Turnbull, and paragraphs [0027] and [0029], in paragraph [0027] Turnbull recites:

“FIG. 2 illustrates an embodiment of the present invention for use with protective headgear such as helmet 205. Such embodiments are particularly advantageous for using a radio device while riding a motorcycle or while engaged in any other activity which requires head protection.”

And in paragraph [0029] Turnbull recites:

“Microphone 210 is preferably attached to an interior portion of helmet 205, because of this configuration microphone 205 may be shielded from the wind and partially shielded from ambient noise. In FIG. 2, microphone 210 is shown attached to the interior of visor 215. This attachment may be made with a suction cup, with an adhesive, or in any conventional manner.”

In contrast to Turnbull, referring to Figure 1 of Magnasco and column 3 of Magnasco, Magnasco recites in column 3, beginning at line 6:

“FIG. 1 illustrates a prospective view of a headset 100 according to the present invention having a rotatable microphone boom 102. The microphone boom 102 includes a microphone 104. The headset 100 also includes an arcuate headband 106, an adjustment mechanism 108 for selectively sizing the headband, and housing 110 which contains circuitry associated with the headset 100 **and mechanical apparatus for rotational attachment of the microphone boom 102**, battery 112 for powering the circuitry contained in the housing 110 and speaker 114.” (Emphasis added)

Magnasco also recites in column 3, lines 25-35:

“The microphone boom 102 is rotatable with respect to the housing 110 and the headband 106 for controlling an operative condition of the headset 100. When the microphone boom 102 is positioned approximately straight forward with respect to a user's head (e.g., approximately between 11 o'clock and 1 o'clock), the headset 100 is preferably in an “off” or “standby” mode. In this mode, the microphone 104 and speaker 114 are in operative for communicating voice signals, however, the base unit preferably can notify the user of an incoming call by transmitting a pre-selected ring signal to the headset 100.”

Further, Magnasco recites in column 3, lines 43-51:

“When the microphone boom is pointing downward as viewed from the side (e.g., between approximately 4 and 5 o'clock), the headset is preferably in a “talk” mode. In this mode, both the microphone 104 and the speaker 114 are operative for carrying on a two-way conversation. In addition, upon transitioning from the “standby” to the “talk” position, the

headset 100 preferably sends a preselected signal to the base unit which instructs the base unit to go off hook.”

Accordingly, the boom 102 of Magnasco is used to control operation of the headset in different modes as illustrated in Figure 1 of Magnasco. In contradistinction, Turnbull in Figure 1 and as recited in the recitation from Turnbull above the speaker 105 is held in a user's ear and the boom 110 does not articulate or rotate relative to the speaker 105. Further, as illustrated in Figure 2 of Turnbull and as discussed above, the invention of Turnbull may be attached to a helmet for riding a motorcycle and the microphone 210 may be attached to the visor of the microphone to shield from wind and ambient noise as recited above. A user of this embodiment of Turnbull would not be raising and lowering the visor in order to control operation of a transmission device as taught by the headset of Magnasco. For all of these reasons, Applicant respectfully submits that a person of ordinary skill in the art would not be motivated to combine the teachings of Magnasco with Turnbull. Even if it were proper to combine the teachings of Magnasco and Turnbull, they still would not provide the embodiments of the present invention as recited in the claims.

Regarding the rejection of claim 3-5, claim 3 recites:

“wherein the push-to-talk sensor or switch comprises the tilt sensor, wherein a transmit mode of the communications device is activated in response to the tilt sensor being tilted more than a predetermined angle from a normalized angle of the direction of force due to gravity for a predetermined time duration.”

Applicant respectfully submits that there is no teaching or suggestion in Turnbull or Magnasco of the push-to-talk sensor or switch being a tilt sensor and that a transmit mode of the communications device is activated in response to the tilt sensor being tilted more than a predetermined angle from a normalized angle of the direction of force due to gravity as provided by the embodiment of the present invention as recited in claim 3. Additionally, claim 3 depends directly from independent claim 1 and claims 4 and 5 depend directly from claim 3. Because of these dependencies, claims 3, 4 and 5 contain all of the features of claim 1 and claim 3. Applicant respectfully submits that Magnasco adds nothing to the teachings of Turnbull so as to render independent claim 1 unpatentable. Accordingly, for all of these reason, claims 3-5 are submitted to be patentably distinguishable over Turnbull and Magnasco, whether considered individually or

combined, and reconsideration and withdrawal of the 35 U.S.C. §103(a) rejection of claims 3-5 is respectfully requested.

Regarding the rejection of claims 17 and 18 under 35 U.S.C. §103(a) as being unpatentable over Turnbull and further in view of Magnasco, claims 17 and 18 recite similar features to claims 3 and 4. Additionally, claims 17 and 18 depend either directly or indirectly from independent claim 15, and by virtue of this dependency contain all of the features of independent claim 15. Applicant respectfully submits that Magnasco adds nothing to the teachings of Turnbull so as to render independent claim 15 unpatentable. Therefore, claims 17 and 18 are also submitted to be patentably distinguishable over Turnbull and Magnasco, whether considered individually or combined, and reconsideration and withdrawal of the 35 U.S.C. §103(a) rejection of claims 17 and 18 is respectfully solicited.

Turning now to the rejection of claims 25-27 under 35 U.S.C. §103(a) as being unpatentable over Turnbull in view of Magnasco, claim 25 has been amended to recite: "wherein detecting the tilt angle comprises detecting a tilt sensor being tilted more than a predetermined angle from a normalized angle of the direction of force due to gravity for a predetermined duration." In contrast, Magnasco in the abstract recites:

"An optical switch for controlling an operation condition of a headset. The headset including a microphone boom that is rotatable with respect to a housing for the headset. A rotator element is coupled to the microphone boom such that the rotator element rotates with respect to the housing along with the microphone boom. Selected portions of a surface of the rotator element are conditioned to be more reflective than the remaining portions. Alternatively, portions of the rotator element are opaque. A pair of optical transceivers are in fixed positions relative to the housing. When the microphone boom is positioned approximately straight upward with respect to a user's head, reflective portions of the rotator element are within a field of view of each optical transceiver of the pair. In this position, the headset is in an "off" or "standby" mode. When the microphone boom is positioned approximately level with the ground, a reflective portion of the rotator element is not within the field of view of the first optical transceiver, while a reflective portion is within the field of view of the second optical transceiver. In this position, the headset in an "mute" mode. When the microphone boom is positioning downward, a reflective portion is not in the field of view of either of the two optical transceivers. In this position, the headset is in a "talk" mode. The optical transceivers are less susceptible to wear, contamination and misalignment, and occupy less space than prior mechanical switch devices."

Accordingly, Magnasco does not teach or suggest the features of the present invention as recited in claims 25-27. Additionally, claims 25-27 depend either directly or indirectly from

independent claim 22. Applicant respectfully submits that Magnasco adds nothing to the teachings of Turnbull so as to render independent claim 22 unpatentable. Therefore, claims 25-27 are submitted to be patentably distinguishable over Turnbull and Magnasco, whether considered individually or combined, and reconsideration and withdrawal of the 35 U.S.C. §103(a) rejection of claims 25-27 is respectfully requested.

Regarding the rejection of claim 33 under 35 U.S.C. §103(a) as being unpatentable over Turnbull in view of Magnasco, claim 33 recites similar features to claim 3. Additionally, claim 33 depends directly from independent claim 31. Because of this dependency, claim 33 contains all of the features of claim 31. Applicant respectfully submits that Magnasco adds nothing to the teachings of Turnbull so as to render independent claim 31 unpatentable. Therefore, claim 33 is submitted to be patentably distinguishable over Turnbull and Magnasco, and reconsideration and withdrawal of the Section 103 rejection of claim 33 is respectfully solicited.

With respect to the rejection of claims 40-42 under 35 U.S.C. §103 as being unpatentable over Turnbull in view of Magnasco, these claims recite features similar to claims 3-5 which distinguish over Turnbull and Magnasco as discussed above. Additionally, these claims depend either directly or indirectly from independent claim 37, and by virtue of that dependency, contain all of the features of claim 37. Applicant respectfully submits that Magnasco adds nothing to the teachings of Turnbull so as to render independent claim 37 unpatentable. Therefore, claims 40-42 are also submitted to be patentably distinguishable over Turnbull and Magnasco, whether considered individually or combined, and reconsideration and withdrawal of the 35 U.S.C. §103 rejection of claims 40-42 is respectfully solicited.

New claim 46 recites:

“a hands-free push-to-talk sensor or switch operable by a preset audible signal, wherein the preset audible signal is one of a static signal, a white noise signal, or a predefined keyword, group of keywords, number, or group of keywords and numbers; ...”

In contrast, as previously discussed Turnbull teaches a switch 130 operable by a user to switch between push-to-talk manual operation and operation using voice-operated transmission (VOX). Applicant respectfully submits that Turnbull does not teach or suggest a hands-free push-to-talk sensor or switch that is operable by a preset audible signal wherein the preset audible signal is one of a static signal, a white noise signal, or a predefined keyword, group of keywords, number or

group of keywords and numbers as provided by the embodiment of the present invention as recited in new claim 46. Applicant further respectfully submits that there is no teaching or suggestion of such features in Turnbull and Magnasco. Accordingly, Applicant respectfully submits that independent claim 46 is patentable over Turnbull and Magnasco and allowance of claim 46 is respectfully solicited.

Claims 47 and 48 recite further features of an embodiment of the present invention that are neither taught nor suggested by Turnbull or Magnasco. Additionally, these claims depend either directly or indirectly from new independent claim 46. Therefore, these claims are also submitted to be patentably distinguishable over Turnbull and Magnasco and allowance of these claims is respectfully requested.

Conclusion

For the foregoing reasons, the Applicant respectfully submits that all of the claims in the present application are in condition for allowance. Reconsideration and withdrawal of the rejections and allowance of the claims at the earliest possible date are respectfully solicited.

If the Examiner has any questions about the present Amendment or anticipates finally rejecting any claim of the present application, a telephone interview is requested.

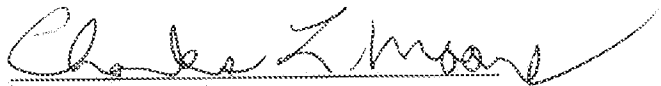
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Respectfully submitted,

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